

Verizon – New England)	Departmental
Penobscot County)	Findings of Fact and Order
Bangor, Maine)	Air Emission License
A-796-71-D-M)	

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Verizon – New England (Verizon), of Bangor, Maine was issued Air Emission License A-796-71-C-R/M on August 2, 2005, permitting the operation of emission sources associated with their Central Office Switching Center.

A recent inspection has revealed that the maximum capacities of Boilers #1 and #2 were listed incorrectly on Verizon's License renewal application. Verizon has therefore requested a minor revision to their License to correct the maximum capacities of Boilers #1 and #2. This revision shall also change Verizon's fuel requirement from firing #2 fuel oil with a sulfur content not to exceed 0.35%, to firing #2 fuel oil that meets the criteria in ASTM D396 in the boilers and the emergency generator, which share a fuel tank.

B. Emission Equipment

Verizon is authorized to operate the following equipment:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type</u>	<u>Stack #</u>
Boiler #1	4.9	35	#2 Fuel Oil	2
Boiler #2	4.9	35	#2 Fuel Oil	2

C. Application Classification

This amendment will increase emissions by less than 4 ton/year for each single pollutant and less than 8 ton/year for all pollutants combined. Therefore, this modification is determined to be a minor revision and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boilers #1 and #2

Boilers #1 and #2 were installed in 1998 and are each rated at **4.9 MMBtu/hr**. Boilers #1 and #2 are therefore not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989.

BPT for Boilers #1 and #2 shall consist of the following:

1. *Low Sulfur Fuel*, 06-096 CMR 106 (last amended June 9, 1999) regulates fuel sulfur content. However, the use of #2 fuel oil **that meets the criteria in ASTM D396** and shall be considered BPT.
2. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits for Boilers #1 and #2. PM₁₀ limits are derived from the PM limits.
3. NO_x, CO and VOC emission limits are based on emission data taken from AP-42, dated 9/98 for the combustion of fuel oil.
4. Visible emissions from the common stack serving Boilers #1 and #2 shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than two (2), six (6) minute block averages in a three hour period.

C. Back-up Generator

Verizon operates one back-up diesel generator rated at 750 kW.

Back-up generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Back-up generators are not to be used for prime power or peak shaving when reliable offsite power is available.

A summary of the BPT analysis for the back-up generator is the following:

1. The back-up generator shares a fuel tank with the boilers. Therefore the use of #2 fuel oil **that meets the criteria in ASTM D396** shall be considered BPT.
2. The back-up generator shall be limited to 500 hr/yr of operation based on a 12 month rolling total. An hour meter shall be installed and operated, and an operating log shall be kept for compliance purposes.
3. 06-096 CMR 103 regulates PM emission limits for the back-up generator. PM₁₀ limits are derived from PM limits.
4. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from the back-up generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2), six (6) minute block averages in a continuous 3-hour period.

D. Annual Emission Restrictions

1. The back-up generator shall be limited to 500 hours of operation based on a 12 month rolling total.
2. Verizon shall be limited to 40,000 gal of #2 fuel oil **that meets the criteria in ASTM D396**.
3. Verizon shall be restricted to the following annual emissions, based on a calendar year:

Total Licensed Emissions for the Facility
(used to calculate the annual license fee)

Tons/Year

Emission Unit	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boilers #1 and #2	0.34	0.34	1.41	0.40	0.10	0.01
Back-up Generator	0.23	0.23	1.00	6.21	1.65	0.17
Total	0.57	0.57	2.41	6.61	1.75	0.18

III.AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Minor Revision A-796-71-D-M, subject to the conditions found in Air Emission License A-796-71-C-R/M, and the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

The following shall replace Specific Conditions 16 through 18 in Air Emission License A-796-71-D-M:

- (16) Boilers #1 and #2
- A. Boilers #1 and #2 shall only fire #2 fuel oil **that meets the criteria in ASTM D396**. Compliance shall be demonstrated by fuel records from the supplier documenting fuel type. [06-096 CMR 115, BPT]
 - B. Emissions from each boiler shall not exceed the following [06-096 CMR 115, 06-096 CMR 103, BPT]:

Emission Unit		PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boilers	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.59	0.59	2.47	0.70	0.18	0.02

- C. Visible emissions from the common stack serving Boilers #1 and #2 shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2), six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]
- (17) Back-up Generator
- A. The back-up generator shall be limited to 500 hours per year of operation, based on a 12 month rolling total. An hour meter shall be installed and operated, and an operating log shall be kept for compliance purposes. [06-096 CMR 115, BPT]
- B. The back-up generator shall only be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. The back-up generator shall not to be used for prime power or peak shaving when reliable offsite power is available. A log shall be maintained documenting the date, time, and reason for operation. [06-096 CMR 115, BPT]
- C. The back-up generator shall be limited to firing #2 fuel oil **that meets the criteria in ASTM D396**. Records from the supplier documenting fuel type shall be kept for compliance purposes. [06-096 CMR 115, BPT]
- D. Emissions from the back-up generator shall not exceed the following: [06-096 CMR 115, 06-096 CMR 103, BPT]

Emission Unit		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Back-up Generator	Lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.93	0.93	3.99	24.83	6.60	0.70

- E. Visible emissions from the back-up generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2), six (6) minute block averages in a 3 hour period. [06-096 CMR 101]

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(18) Fuel Use Restrictions

Verizon shall be limited to firing 40,000 gallons per calendar year of #2 fuel oil **that meets the criteria in ASTM D396**. Records from the supplier documenting quantity and type of fuel delivered shall be kept for compliance purposes. [06-096 CMR 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2007.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-796-71-C-R/M.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 5/23/2007

Date of application acceptance: 6/13/2007

Date filed with the Board of Environmental Protection: _____

This Order prepared by Jonathan Voisine, Bureau of Air Quality.